

BOARD MEETING DATE: December 2, 2016

AGENDA NO. 2

PROPOSAL: Set Public Hearing February 3, 2017 to:

Adopt Draft Final 2016 Air Quality Management Plan

The Draft Final 2016 Air Quality Management Plan (AQMP) has been developed in partnership with CARB, U.S. EPA, SCAG and stakeholders throughout the region, including input from local government, health and environmental organizations, and the business community. The AQMP is the legally enforceable blueprint for how to meet and maintain federal air quality standards. The 2016 AQMP identifies control measures needed to demonstrate attainment with the federal 8-hour and 1-hour ozone standards, and the annual and 24-hour PM2.5 standards in the South Coast Air Basin. (Reviewed: Mobile Source Committee, January 22, March 18, April 15, May 20, June 17, July 22, September 16 and October 21, 2016)

RECOMMENDED ACTION:

Set public hearing February 3, 2017 to adopt the Draft Final 2016 Air Quality Management Plan.

Wayne Natri
Acting Executive Officer

MK

2016 Air Quality Management Plan



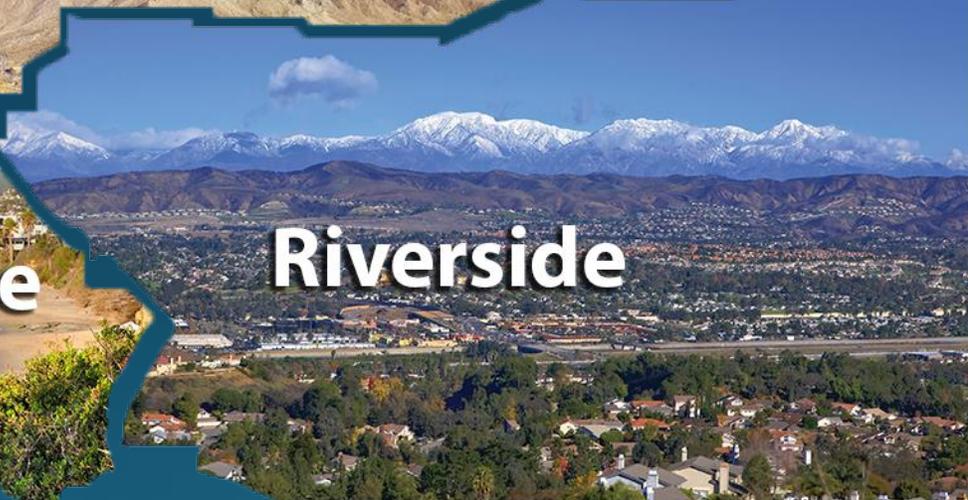
Los Angeles



San Bernardino



Orange



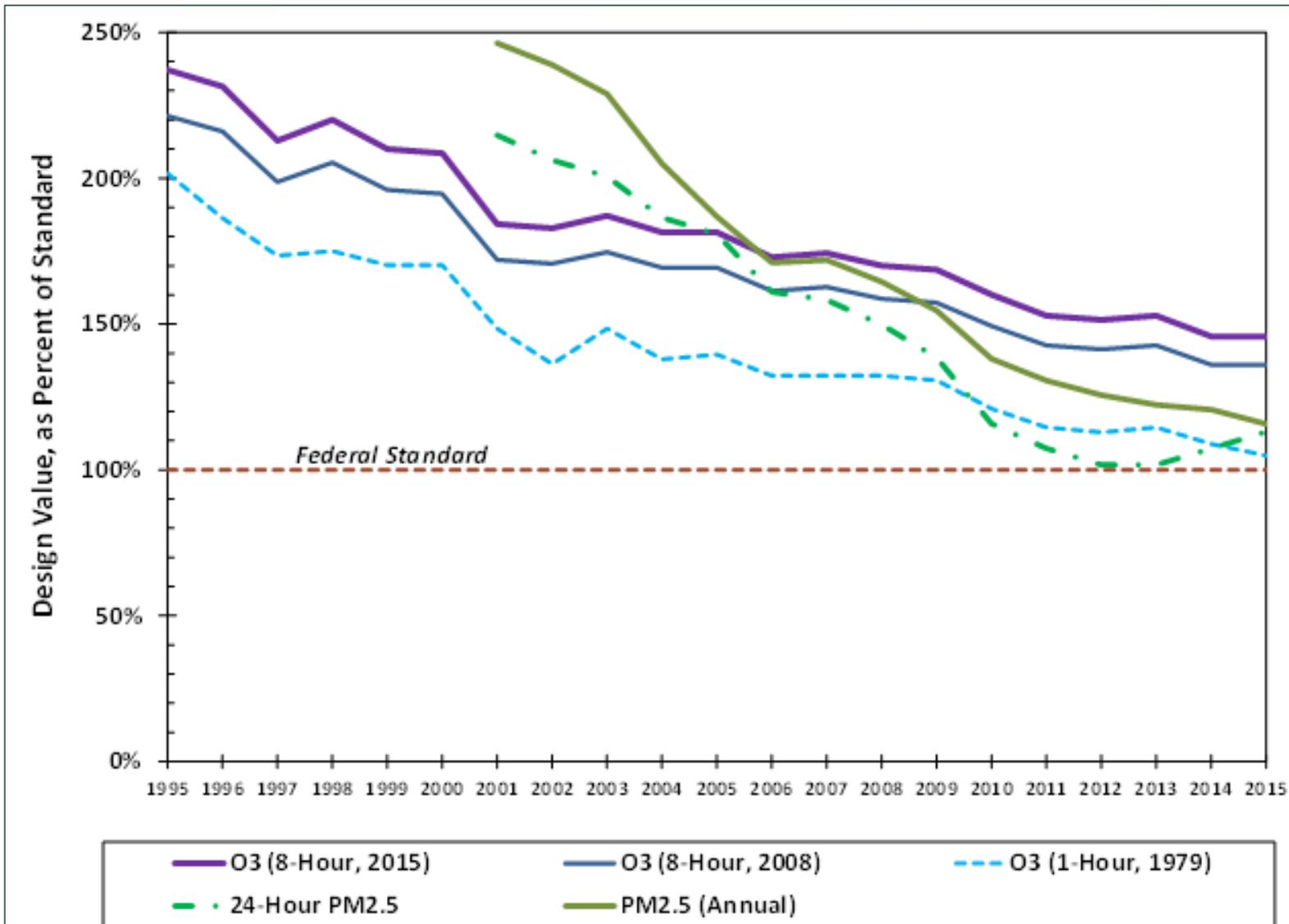
Riverside

2016 AQMP
Set Hearing

December 2, 2016



Ozone & PM2.5 Design Value Trends



Standards to be Addressed in Plan

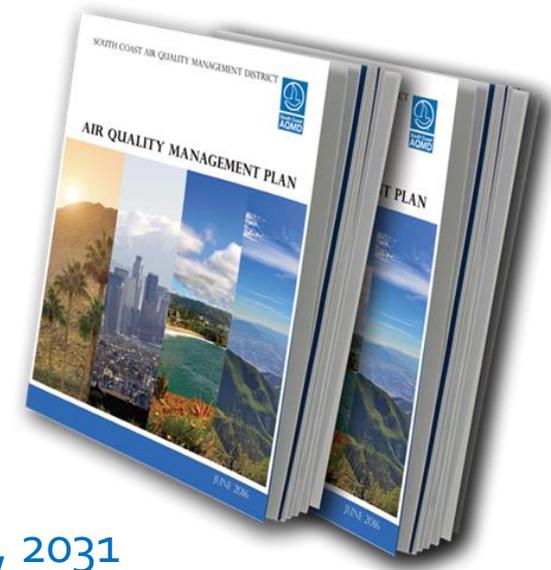
- Clean Air Act requires attainment of standard to be achieved as “expeditiously as practicable” but no later than attainment year listed.
- Integrated Plan to address all standards in 2016 AQMP

Criteria Pollutant	Standard	Classification	Latest Attainment Year	SIP Submittal Due Date
2008 8-hour Ozone	75 ppb	Extreme	2031	July 20, 2016
2012 Annual PM _{2.5}	12 µg/m ³	Serious*	2025	October 15, 2016
2006 24-hour PM _{2.5}	35 µg/m ³	Serious	2019	August 12, 2017
1997 8-hour Ozone	80 ppb	Extreme	2023	Update
1979 1-hour Ozone	120 ppb	Extreme	2022	Update

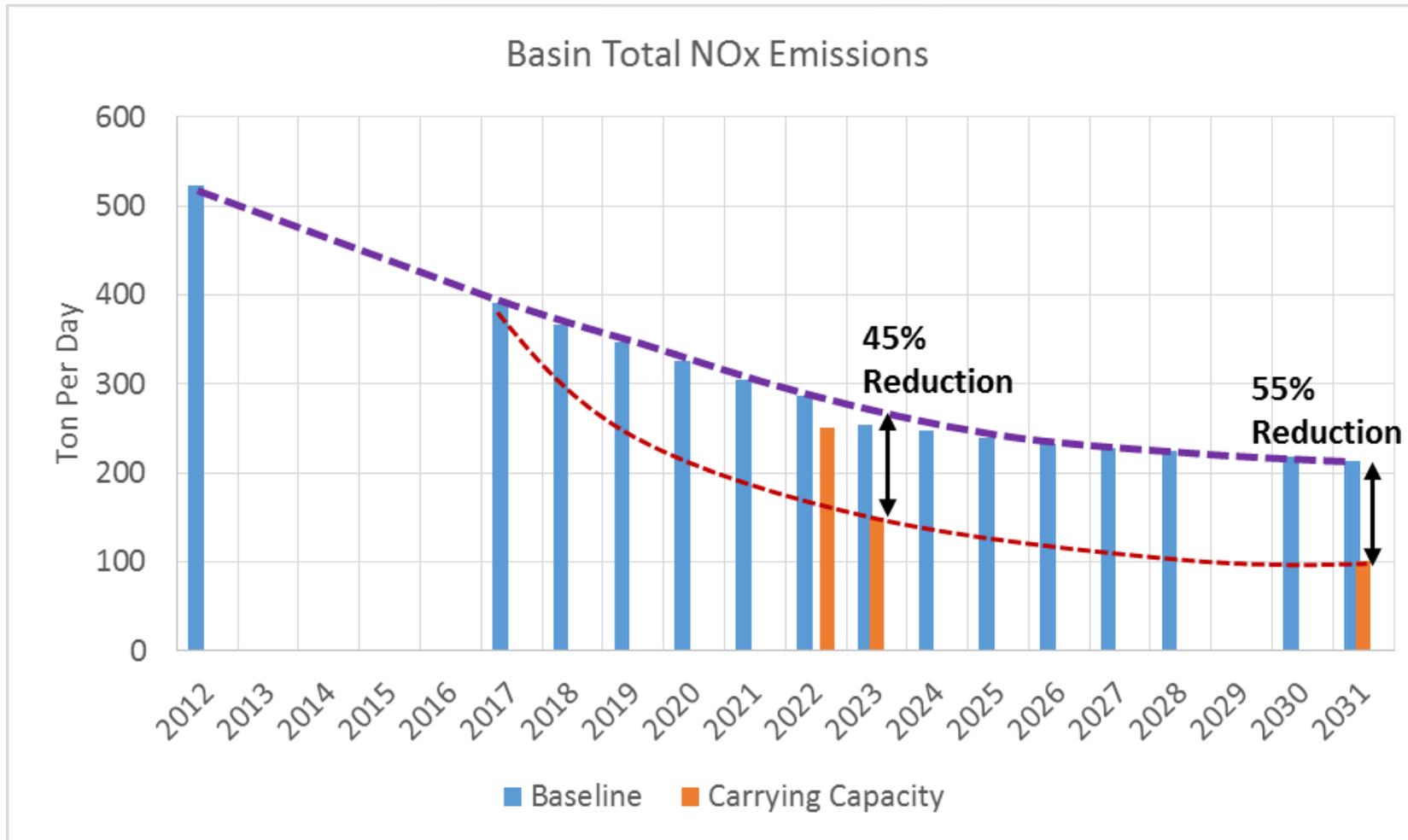
*Draft 2016 AQMP requests re-classification to 'serious' from 'moderate'

2016 AQMP Contents

- Latest emission inventory (*base year 2012, attainment years and quantitative milestone years*) includes SCAG's transportation control measures
- Air Quality Data
- Control Strategy
 - ✓ SCAQMD stationary and mobile sources
 - ✓ CARB mobile (on-road and off-road) sources and consumer products
 - ✓ Federal sources (aircraft, locomotive, ocean-going vessels)
- Attainment demonstration modeling
 - ✓ Ozone strategy to meet 1-hour and 8-hour ozone standards by 2022, 2023, 2031
 - ✓ Ozone strategy to meet annual PM_{2.5} as expeditiously as practicable by 2025
 - ✓ Baseline emissions to meet 24-hour PM_{2.5} standard by 2019
- Clean Air Act requirements (*RACM/BACM, Impracticability Demonstration, Reasonable Further Progress, General/Transportation Conformity, PM Precursors, and New Source Review*)
- Other related topics – Toxics, Climate Change and Energy
- Public participation

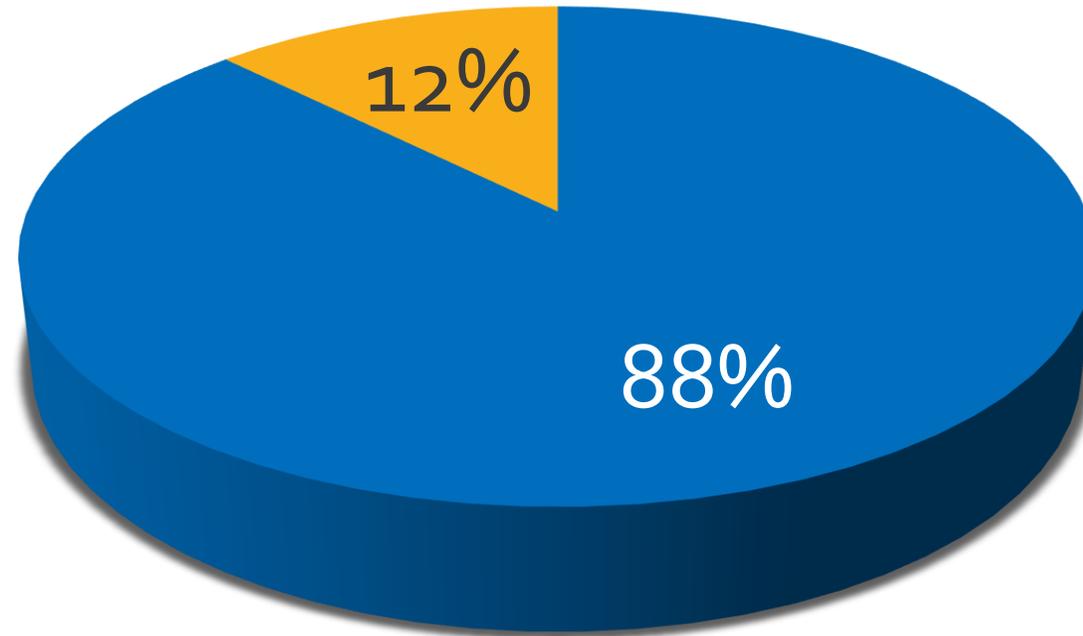


Emission Reductions Needed (NOx)



8-hour Ozone strategy targeting 2023 will ensure 1-hour attainment in 2022 as well as 24-hour and annual attainment in 2019 and 2025, respectively.

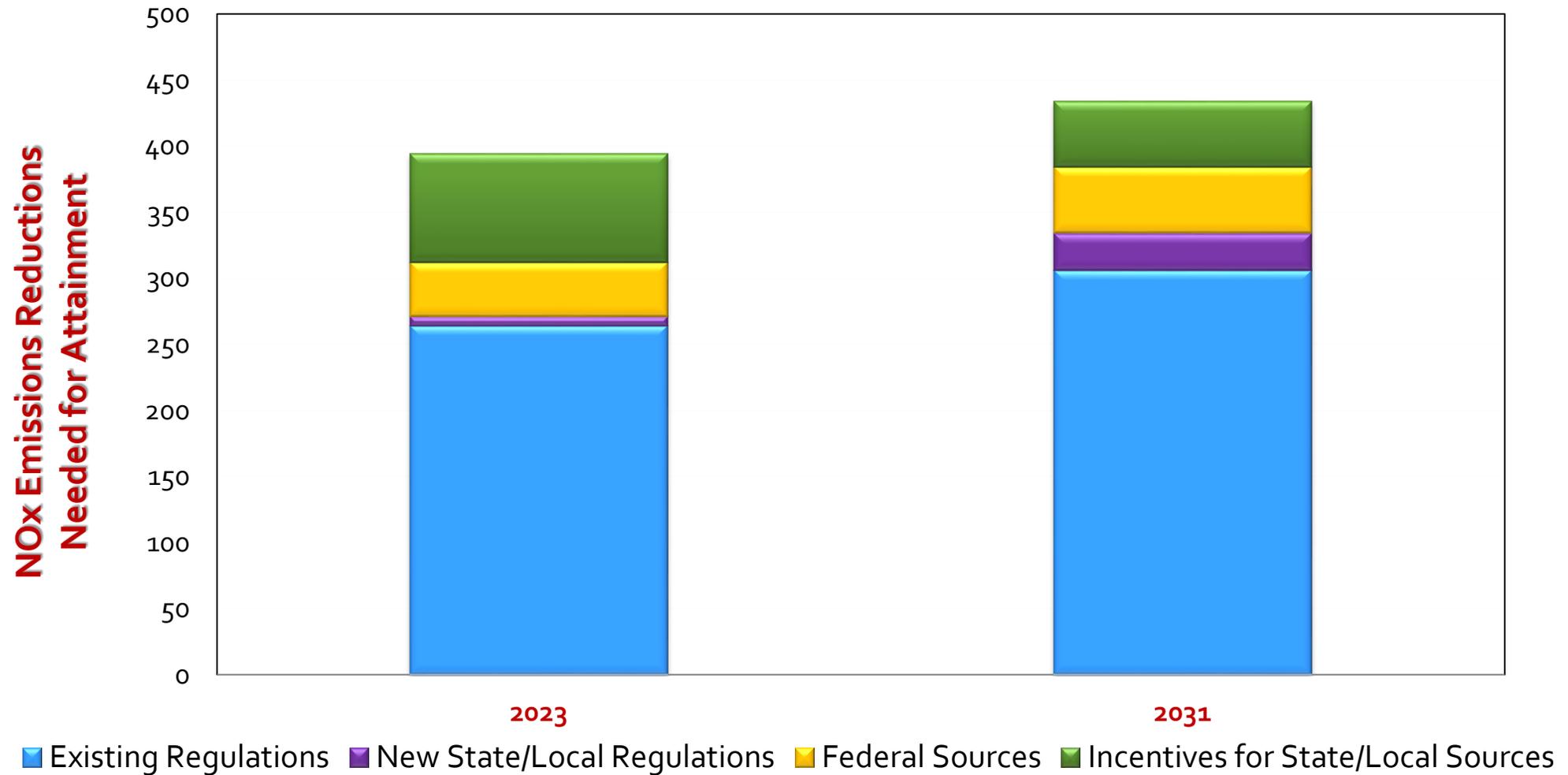
Sources of NO_x: Mobile vs. Stationary (2012)



■ Mobile Sources ■ Stationary Sources

Based on Summer Planning NO_x Emissions Inventory (Appendix III, Draft 2016 AQMP)

Overall Plan Strategy



Legal Authority and Responsibility

- In 2012, 88% of NO_x comes from mobile sources
- Limited local authority over mobile sources



Stationary Source Strategy

Thoroughly evaluated all source categories and control options

- Detailed look at emission inventory
- Analysis of measures implemented through-out the country (RACT)
- Symposium, working groups, and advisory group

Limited feasible regulatory options remaining for NO_x reductions

- Reductions in NO_x from non-refinery flares
- NO_x controls for cooking appliances
- Further NO_x reductions from RECLAIM reassessment
- Commercial/Residential equipment
- Alternatives to Diesel Back-up Generators

If all stationary sources brought to zero emissions, would still not meet goals



Facility-based Measures

- *Set targets, work collaboratively to achieve creditable NO_x reductions*
- *Approach:*

TRUST

VERIFY

ENFORCE

**PIVOT to Regulation
if Needed**

- ✓ **New Development and Redevelopment Projects (EGM-01)**

- ✓ **Commercial Marine Ports (MOB-01)**

- ✓ **Commercial Airports (MOB-04)**

- ✓ **Rail Yards/Intermodal Facilities (MOB-02)**

- ✓ **Warehouse Distribution Centers (MOB-03)**



Changes in Draft Final Plan

Based on Comments received on the Revised Draft Plan

- Prioritized funding distribution to benefit disadvantaged communities
- Added latest emission reductions based on final attainment modeling
- Updated Chapter 2 to reflect public health comments received on Appendix I
- Added incentive funding shortfall procedure in Chapter 4 / Appendix IV-B
- Added consideration of “life cycle” analysis
- Added collaboration to increase efficiencies
- Clarified engine inventory and acknowledged need for reliable emergency power in certain circumstances (CMB-01)
- Highlighted current inventory of non-refinery flare facilities (CMB-03)
- Expanded discussion of RECLAIM re-assessment (CMB-05)
- Clarified the review of NPDES permits to ensure future proposals do not conflict (BCM-03)



Funding Needed

- Accelerated early deployment of zero and near-zero technologies for mobile and stationary sources
- Significant expansion of financial incentive programs needed
- **Mobile Source** Emission Reduction Estimated Total Funding Range - 10 to \$12 Billion over next 15 Years
- **Stationary Source** Emission Reduction (*residential, commercial, small business*) Estimated Total Funding Range - \$1 to \$2 Billion over next 15 Years



~ \$1 billion/year

Related Documents

- Draft Program **Environmental Impact Report** (CEQA)
 - ✓ Released September 16, 2016 for 60-day public comment and review period
 - ✓ 9 comment letters received
- **Socioeconomic Assessment**
 - ✓ Costs and Benefits released August 31, 2016
 - ✓ Environmental Justice Impacts released September 23, 2016
 - ✓ Job impacts, Sub-regional modeling results, and impacts from CEQA Alternatives released on November 2, 2016
 - ✓ Complete updated Assessment with appendices released November 19, 2016
 - ✓ Additional 30-day public review and comment period
- **Incentive Funding Action Plan**



Socioeconomic - *Cost of Revised Draft AQMP*

Measures	Present Worth Value (Billions of 2015 dollars)				Average Annual Amortized Cost (2017-2031) 2015\$B
	Remaining Incremental Cost		Incentives	Total Incremental Cost	
SCAQMD Stationary Source	\$4.3	+	\$1.4	= \$5.7	\$0.3
SCAQMD Mobile Source	<\$0.1	+	\$0.6	= \$0.6	<\$0.1
CARB Mobile Source	-\$3.3	+	\$12.6	= \$9.3	\$0.6
Total	\$1.1	+	\$14.6	= \$15.7	\$0.85

Note: Numbers may not add up due to rounding.

Socioeconomic - *Public Health Benefits*

- Based on lowering mortality (*death rates*) and morbidity (*illness and other health effects*) risks as a result of implementing the Revised Draft 2016 AQMP
 - ✓ Overall public health benefit \$258 billion from 2017-2031 in 4-county region
 - ✓ ~\$24 billion public health benefit per year
 - ✓ 99 percent estimated public health benefits associated with avoided premature deaths from reduced long-term exposure to PM_{2.5}



Financial Incentives Action Plan Development

- Action Plan to identify and develop process to secure additional incentive funds
- Draft Funding Plan Outline
 - ✓ Background
 - ✓ Existing funding programs (past and current)
 - ✓ Potential new funding opportunities
 - ✓ Activities to pursue funding
 - ✓ Schedule/Reporting
- Draft 2016 AQMP - Discussion of level of funding incentives needed to help achieve NO_x emission reductions associated with the State SIP Strategy “Further Deployment of Cleaner Technologies” measures
 - ✓ Funding Incentives - \$10 to \$12 billion for mobile sources; \$1 to \$2 billion for stationary sources over next 7 to 15 years (~\$1 billion/year)
 - ✓ Proposed actions at local/regional, state, and national levels



Example Funding Sources – *All options*

being evaluated

Expanding
Existing
Sources

- Diesel Emissions Reduction Act (DERA), Air Shed Grants
- U.S. Department of Energy (Clean Cities Program)
- Carl Moyer Program
- Proposition 1B
- Low Carbon Transportation Funding (CARB)
- AB 118 – AQ Improvement Program/Fuel & Vehicle Technology Program
- AB 2766 – Local Governments
- SCAQMD Clean Fuels Fund

New
Potential
Sources

- VW Settlement
- Future DERA Funding
- Cargo Container Fee
- Mileage-Based (VMT) User Fee
- Gas Sales Tax
- Public/Private Partnerships
- Expand DMV Registration Fees and Low Carbon Transportation Funding

Activities to Pursue Funding

- Analysis of Authority
- Formation of Stakeholders Working Group
- Creation of National Collaborative
 - ✓ NACAA for state/local air agencies
 - ✓ Private Sector Members (Engine Manufacturers, MECA, Trade Associations, Labor Unions, etc.)
 - ✓ Non-government Organizations (Local, State, National)
- State Collaboration
 - ✓ Work with CAPCOA
 - ✓ Public/Private Partnerships



Plan Development Status

- Draft Plan released June 30th
- Revised Draft Plan released October 7th
 - ✓ Included changes based on 69 comment letters received on Draft Plan
 - ✓ Plan and technical appendices posted online
 - ✓ Summary of major revisions posted online
- Releasing Draft Final Plan today (*60-day set hearing*)
 - ✓ Included changes based on 30 comment letters received on Revised Plan
- Responses to all comments received compiled into one document to be released
- Conducted 4 regional Public Hearings in November
- Ongoing AQMP Advisory Group and regional stakeholder meetings
 - ✓ 163 Advisory/stakeholder meetings during the development the 2016 AQMP
- Seek approval from Governing Board in February 2017

